627.41(73)

## RIVERS AND FLOODS.

## FLOODS DURING FEBRUARY.

By Alfred J. Henry, Meteorologist.

[Weather Bureau, Washington, Mar. 26, 1921.]

The floods of the month were moderate in character and confined to the south Atlantic and Gulf coast States, with the single exception of a near flood in the Willamette River of Oregon, on the 10th and 13th. The floods in eastern districts were due in each case to heavy rains which fell during the period February 9–12.

The usual details appear in the table below:

The property loss was small.

## SNOWFALL IN ELEVATED REGIONS.

At the end of February, 1921, the snow cover in the higher Sierra Nevada of California is very nearly up to the normal. In Oregon there is also very nearly the normal snow cover in the higher portions of the Cascades. The precipitation of February was, however, mostly in the form of rain, which was effective in removing some of the snow cover in the lower mountain slopes.

the snow cover in the lower mountain slopes.

Over the eastern slope of the Sierra Nevada and the high mountain ranges of the Humboldt basin in Nevada, the season's snowfall up to January 31 was slightly

greater than normal.

In Colorado the snow covering at the end of February was less than the average in all of the watersheds of that

The snow cover in Washington is greater than the

average and well packed.

In Utah the snow cover is of good depth in some districts and only fair in others, especially in the southern portion of the State. Somewhat similar conditions prevail in Wyoming.

Estimated loss by flood during February, 1921.

Rivers of	Tangible property, bridges, roads, build- ings, etc.	Estimated loss of crops.		Live stock or	Suspen-	Value of
		Mature 1.	Prospec- tive.	other farm property.	sion of business.	warnings.
North Carolina South Carolina Georgia.	\$5,000 4,000 1,200	\$650		\$500 1,175	<b>\$5</b> 65	\$16,000 50,475
Alabama Tennessee Arkansas	10, 000 800			450	2,000	5,000
Total	21,000	650		2, 125	2, 565	71, 475

Flood stages during month of February 1921.

River.	Station.	Flood	Above flood stages—dates.		Crest.	
		stage.	From—	То	Stage.	Date.
Atlantic Drainage:		Feet.			Feet.	
Roanoke	Weldon, N. C	80	12	14	36.4	13
Tar	Weldon, N. C Greenville, N. C	13	15	17	13. 2	16
Neuse	Neuse, N. C	14	11	15	17.3	13
-	Smithfield, N.C	J 14	3	4	14.6	3
İ	Simulation, N.C	14	11 1	16	17.8	3 13
Cape Fear	Elizabethtown, N.C		2 11	5 17	25. 5 32. 3	3 14
Haw	Fayetteville, N. C Moncure, N. C Conway, S. C Cheraw, S. C Ffingham, S. C Rimini, S. C Ferguson, S. C Catawba, S. C	35 22	11 10	14 11	48.0 26.0	12 11
Waccamaw	Conway, S. C	7	22	24	7.1	22, 23
Peedee	Cheraw, S. C	27	11	13	36.6	12
Lynches	Effingham, S. C	14	15	17	16.5	16
Santee	Rimini, S. C	12	(9)	(2) (2)	23.7 17.2	15
	Ferguson, S. C	12	(1)	(3)	17.2	16
Catawba	Catawda, S. C	12	11	``12	16.4	11 2
Wateree	Camden, S. C	{ 24	2	2 14	24.7	_2
	Columbia, S. C	\ 24 15	19	13	31. 0 23. 6	14
Congaree	Disim S C		10	13	23.0	12 11
BroadSaluda	Blairs, S. C. Pelzer, S. C.	15 7	10	12	11.0	ii
Datuua	Channells S C	14	10	14	22. 5	ii
Savannah	Augusta, Ga	32	ii	12	35.1	ii
Broad (Ga.)	Carlton, Ga	11	1 79	íĩ	22.4	- 4
Oconee	Chappells, S. C Augusta, Ga Carlton, Ga Milledgeville, Ga	22	1ŏ	12	27. 2	11
Ocmulgee	Macon, Ga	18	10	12	21.6	īī
	Macon, GaAbbeville, Ga	11	15	20	14.6	9 11 11 17
	Lumber City, Ga	15	21	21	15.0	21
East Gulf drainage:	D T		l i			
Apalachicola	River Junction, Fla.	12	11	27	18.8	15
Flint.	Woodbury, Ga Norcross, Ga	10	11	11	10.0	11
Chattahoochee	Alogo Oc	16 30	10 12	11	20.4	10
Alabama	Alaga, Ga Montgomery, Ala	35	11	14 16	31.9 42.9	13 13
211000111011111111111111111111111111111	Salma Ala	35	12	22	43.5	14,15
Coosa	Rome, Ga	30	iī	13	33.9	***;
	Rome, Ga	22	10	20	28.3	11 16
	Lock No. 4, Lincoln,	17	10	21	21.9	iĭ
	Ala.	Ì			ì	l
Etowah	Canton, Ga Resaca, Ga	11	9	11	8 21.0	9 11
Qostanaula	Resaca, Ga	25	10	14	33.0 52.7	11
Tombigbee	Demopolis, Ala	39	12	28	52.7	19 12
Black Warrier	Demopolis, Ala Tuscaloosa, Ala	46	10	14	58.0	12
Pearl	Jackson, Miss	20	17	(²)	25.1	22
Mississippi drainage:	T ofowette Ind	11	9	10	12.7	ہ ا
French Broad	Lafayette, Ind Asheville, N. C	1 4	10	ii	4.3	11
	Dandridge, Tenn	12	liĭ	ii	13.4	9 11 11
Big Pigeon	Newport, Tenn Newport, Tenn Knoxville, Tenn Chattanooga, Tenn Guntersville, Ala	6	10	ii	6.4	#
Tennessee	Knoxville, Tenn	12	ii	12	17. 8	10 11 13
	Chattanooga, Tenn	83	12	13	34.5	ĵŝ
	Guntersville, Ala	31	14	15	31.4	15
			12	14	18.7	12
77-1 4 37: 12	Riverton, Ala Mendota, Va	32	11	19	37.5	13, 17 11
Holston, North	Mendota, va	8	11	11	9.0	11
Fork. Hiwassee	Charleston Tonn	22	11	12	94.0	
Tallahatchie	Charleston, Tenn Swan Lake, Miss	25	26	(3)**	24.2	11 28
Petit Jean	Danville, Ark	20	25	8_	25.3 22.4	26
Cache	Patterson, Ark	9	23	27	9.3	24,25
Sulphur	Ringo Crossing, Tex.	20	20	24	23.0	21, 21
West Gulf drainage:		i	1		1	
Trinity	Dallas, Tex	25	20	24	33.7	21
Pacific drainage:	Trinidad, Tex	28	24	(*)	32. 6	28
yv.	T	ſ 10	10	11	11.2	10
T37/1110						
Willamette	Eugene, Oreg	16 20	21	21	10.0	21
Willamette Santlam	Oregon City, Oreg Jefferson, Oreg	12	13 10	21 14 11	10.0 12.0 12.0	13,14 10

<sup>1</sup> Continued from January.

<sup>2</sup> Continued into March.

\* Estimated.

## EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, FEBRUARY, 1921.

By J. WARREN SMITH, Meteorologist in Charge.

[Agricultural Meteorology, Weather Bureau, Washington, Apr. 2, 1921.]

February, 1921, was generally favorable for outdoor operations, except that the soil was too wet for preparation for planting in some south-central districts. Farm work made favorable progress in Central and Southern States, and at the close of the month considerable land had been prepared for corn and cotton. Some gardens and potatoes were planted as far north as southern Nebraska, and spring wheat seeding had commenced in the southern portion of the spring wheat belt.

Winter grains were largely unprotected by snow cover throughout the central portion of the country, but, as mostly mild temperatures prevailed, there was little complaint of damage to winter wheat or other grains. Winter wheat maintained its previously reported satisfactory condition, although near the close of the month the ground was becoming dry in the western Great Plains, where some harm resulted from the blowing of surface soil.

Cool nights and local frosts retarded the growth of tender truck crops the latter part of the month in some southeastern districts, while truck needed rain in the lower Mississippi Valley and in some of the more south-